ABSTRACT

Apparatus and method are provided for the control of the relative position of two optical structures, such as a lenticular screen (1) and corresponding barrier screen (2), such as are typically used in an autostereoscopic display. The provision of special patterns on the barrier screen combined with the use of specific lens elements (4) of the lenticular screen provides for a stable and accurately located viewing zone, without the need for the structural stablity which would be demanded using independent position monitoring means for each of the components. Both lateral and longitudinal control of the location of the viewing zones are easily provided and manufacturing tolerances and dimensional changes which may be caused by thermal effects are automatically accommodated with a tapered lenticular structure. The patterns are constructed so that a short fragment of the image thereof (9, 10, 11) is unambiguously identifiable, enabling the precise measurement of a range of relative positions which exceeds the practical field of view of the lens elements.

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